

**Delta Operations for Salmon and Sturgeon (DOSS) Group**  
**Conference call: 03/22/11 at 9:00 a.m.**

**Objective:** Provide advice to the Water Operations Management Team (WOMT) and National Marine Fisheries Service (NMFS) on measures to reduce adverse effects from Delta operations of the Central Valley Project and the State Water Project on salmon and green sturgeon. DOSS will coordinate the work of other technical teams. DOSS notes and advice can be found at: <http://swr.nmfs.noaa.gov/ocap/htm>

**DWR:** Andy Chu, Mike Ford, Angela Llaban, Cynthia LaDoux-Bloom

**FWS:** Nick Hindman

**NMFS:** Barbara Rocco, Bruce Oppenheim, Barb Byrne, Garwin Yip

**DFG:** Dan Kratville, Joe Johnson

**Reclamation:** Josh Israel

**SWRCB, EPA:** not present

**Agenda:**

- 1) Fish monitoring data
- 2) Water project operations & OMR flows
- 3) Weather forecast
- 4) Sacramento River monitoring new station requirements
- 5) Smelt Working Group update
- 6) Coded wire tags

**Fish Monitoring:** The following table presents the fish monitoring data from 3/15/11–3/21/11

Location	Chipps Is. Midwater Trawl	Sacramento Kodiak Trawl	Mossdale Kodiak Trawl	Beach Seines	Knights Landing RST	Tisdale Weir RST	Moulton Weir RST	Deer/Mill Creeks RST
Sample Date	3/14, 3/16, 1/18	3/14, 3/16, 3/18	3/14, 3/16, 3/18	3/15, 3/17, 3/18		3/16–3/17	3/16–3/19	No data
Total Catch	16	26	0	495		17	37	
FR	0	0		348		17	34	
LFR	0	0				0	0	
WR	4	3		1		0	0	
SR	0	3		117		0	2	
(Ad-clips)	0	0		3		0	1	
DS	10	0		23		0	0	
LFS	0	0				0	0	
SPTL	1	0		1		0	0	
SH (ad-clip)	1	0		2		0	0	
SH (natural)	0	0				0	0	

<b>Water Temp. (avg. °F)</b>	54.3	51.6		52.2		51.8	51.4	
<b>Flows (avg. cfs)</b>						23,000	36,740	
<b>Turbidity (avg. NTU)</b>						31.5	43.6	
<b>FR/SR Avg. CPUE</b>						3.46	4.70	
<b>WR/LFR Avg. CPUE</b>						0	0	

**Key:** FR = Fall run; LFR = Late-fall run; SR = Spring run; WR = Winter run; SH = Steelhead; DS = Delta smelt; LFS = Longfin smelt; SPTL = Splittail, CPUE = catch per unit of effort.

Moulton Weir: Traps were knocked out by storm events. Timber is coming down and causing debris in traps. There is a lot of flow coming down; water is up to the top of the banks.

Tisdale Weir: Traps cannot continue working until the debris (logs) goes by or is cleaned up.

Knights Landing: The traps are still in; however, the weirs are ‘peeling’ off most of the debris. One ad-clipped steelhead was caught on 3/18. Total catch was 125 fish from 3/17–3/21. CPUE = 62 for fall and spring run; 0.5 for winter and late-fall run Chinook.

**Salvage data (3/14–3/20/11)** For additional info see:

<http://www.water.ca.gov/swp/operationscontrol/calfed/calfedmonitoring.cfm>

### *Chinook*

CVP: There were no fall run or late-fall run salvaged. There were 36 non-clipped spring run and 17 ad-clipped winter run salvaged. Loss of non-clipped spring run was 23; loss of ad-clipped winter run was 13. There were 148 non-clipped winter-run salvaged, for a loss of 106.

SWP: No fall or late-fall run were salvaged. There were 12 non-clipped spring run salvaged for a loss of 51; 5 ad-clipped winter run salvaged for a loss of 22; and 140 non-clipped winter run salvaged for a loss of 619.

Cumulative total: The combined YTD loss for winter run is 3,913 since 10/1/10, which has surpassed the halfway mark for incidental take.

### *Steelhead*

CVP: There were 4 hatchery and 12 natural (non-clipped) fish salvaged.

SWP: There were 4 hatchery and 1 natural fish salvaged.

Cumulative total: YTD combined steelhead salvage is 264.

**SWP & CVP OLDER JUVENILE\* CHINOOK LOSS & LOSS DENSITY**  
**03/14/2011 through 03/20/2011**

Date	OLDER JUVENILE LOSS** (# fish)			Combined Older Juv Loss Density (fish/TAF)
	SWP	CVP	Combined	
03/14/2011	157.65	19.32	176.97	11.70
03/15/2011	26.67	20.16	46.83	3.44
03/16/2011	90.19	8.64	98.83	7.26
03/17/2011	78.83	8.64	87.47	6.10
03/18/2011	80.97	2.88	83.85	6.16
03/19/2011	36.22	28.80	65.02	4.78
03/20/2011	148.24	17.28	165.52	11.51
03/21/2011	0	10.88	10.88	0.80

DWR-DES 3/21/2011

Preliminary, subject to revision

\*Older juveniles defined as all Chinook above the minimum winter-run length (Delta Model)

\*\*Loss data obtained from DFG, Stockton

The minimum size for winter-run Chinook is 111 mm.

**Coded Wire Tags (CWT) results:** The confirmed loss of spring surrogates is 0.149% for the 12/21/10 release, and 0.040% for the 1/14/11 release. We have not received an update on reading the tags. They were last read at CVP on 2/19/11, and at SWP on 2/28/11. There are 26 unread tags. Most of the unread tags are in the winter-run size category. The hatchery winter-run release is typically smaller than the spring-run surrogate releases from Coleman NFH. The number of hatchery winter-run released is lower this year, as well. Spring run are coming down later in the year and are 68–110 mm, which is smaller in size than winter run hatchery release. Larger size spring-run yearlings come down in the fall and then there is a gap until now, when YOY spring run start coming down. Winter run are typically 111–295 mm at this time of year.

Reclamation (Israel) reported on the current staffing and funding issues surrounding receiving CWT data on a timelier basis. The tags are read by FWS in Stockton as a courtesy to other agencies, but there is little if any, funding for tag readers, staff, etc. Therefore, there is no commitment to read the small number of tags coming from the fish facilities. CWT's would need to be picked up and delivered daily to Stockton to be read on a real-time basis. The fish agencies don't have the necessary staff or funding to read CWTs. The NMFS BiOp only requires projects report out the CWT data weekly. Discussed 3 options; 1) biologists at facilities read the CWTs, 2) prioritize facility tags at FWS in Stockton, and 3) develop contract with Pacific States Marine Fisheries Commission for one technician to read the CWTs.

**Action item 1):** Israel was asked to check with Brent Bridges, on whether Reclamation biologists at Tracy fish facility can read the CWTs on a daily basis.

DWR (LeDoux-Bloom) has been working on issue for 10 weeks with Dean Messner, DWR head of Environmental Services. We believe that onsite CWT reading is doable and are investigating “pen dragon” and having a biologist onsite. We have a BiOp meeting tomorrow and will follow

up with Messner and report back to the DOSS group. There is not enough work to have one person dedicated to this (5 hrs/week estimated).

**Action item 2):** LeDoux-Bloom will meet with Messner regarding the feasibility of getting a more efficient method of reading CWTs and will report back to the DOSS group at the next call on 3/29/11.

**OMR Flows:** Gages are affected by the recent storm events (high winds and tides) and gage reading may not coincide with formula data. The OMR index is steady at -2,500 cfs. The agencies agreed to use both the gage and index to compare the data from each. Since January, there is quite a bit of missing data from the USGS gages. We can compare only about 7–8 data points over 30 days of data. DWR met with Reclamation to discuss gage vs. formula data.

**Sacramento River new monitoring station requirements:** The intent of the new monitoring station is to get more information about when fish are arriving in the Delta from Red Bluff and what survival rates. The location of the new station was discussed with the DOSS group. The question was raised about whether monitoring at Tisdale should continue or a new monitoring station be constructed at another location. The issue of funding was discussed, which is only until the end of the month at Tisdale. DOSS could decide to continue with Tisdale monitoring until a more expansive objective is developed. DOSS should focus on the methods and getting the most out of the data. We need to show results, or move on to other pilot projects. Only one new station is required per the NMFS BiOp to fill in the gap between RBDD and KL stations. DWR requested a letter from NMFS agreeing with the decision to satisfy the BiOp.

It was suggested that DOSS decide on location while DWR approaches Reclamation for funding. There is also an “Upper Sacramento River Monitoring Work Team” – meeting 4/26–4/28 Eric Lester, DWR Northern Office, is in charge this year.

DOSS agreed to continuing with the Tisdale monitoring station and reviewing the information again in 1 year. There might be a need for a new contract to do so.

**Smelt working group (SWG) update:** Notes are posted on the FWS website at:  
<http://www.fws.gov/sfbaydelta/ocap/>

There were no recommendations at this time; the OMR flows to protect salmon are also protecting delta smelt. Flows are high from recent storm events. Water temperature for the three-station average is 52.9°F. There is a distribution of longfin smelt in the Bay. 20-mm Survey partial survey #1 was in the field last week. Sample processing is ongoing. No longfin or delta smelt larvae were detected at the central and south delta stations. Larval sampling has not been done since 3/20/11. Spring Kodiak Trawl #3 was in the field the week of March 7. A total of 52 delta smelt were collected. None were collected in the south and central Delta. 2 spent females were collected: 1 at station 715 and 1 at station 719. 7 ripe females and 3 ripe males were collected. The majority of smelt were collected from the Sacramento Deepwater Ship Channel and Montezuma Slough. Smelt Larva Survey #5 begins this week. The final 2010 FMWT Index is 29 for delta smelt and 191 for longfin smelt. The 2010 Delta Smelt Recovery Index (based on September and October) is 11.

**Operations (3/22/11):** As of this date, SWP and CVP report that demand is controlling exports not the OMR flow criteria in the NMFS BiOp. DWR reported that they are running out of places to put the water they are currently pumping. SLR and the canals are full.

SWP		CVP	
Flows/Exports (cfs)			
Clifton Court Forebay	4,500	Jones Pumping Plant	4,000
Outflow	106,334	American- Nimbus	25,000
Total Delta Inflow	112,530	Sacramento-Keswick	35,000
		Stanislaus - Goodwin	1,300
Feather - Oroville	30,000	Merced	
Sacramento River at Freeport	82,539	Mokelumne	
San Joaquin at Vernalis	11,283	Tuolumne	
OMR (daily)			
OMR 5 day	-3,271		
OMR 14 day	-2,692		
Reservoir Storage (TAF)			
San Luis	1067	San Luis	967
Shasta	4198		
Folsom	665		
Delta Operations			
DCC	closed	E/I (%)	10.3
Outflow Index (cfs)	~107,800	X2 (km)	NA
Water Temperature (°F)	51.3		

**Real-time data reporting meeting:** DWR (Chu) met with the Skinner Fish Facility staff, but has not yet met with Reclamation staff at Tracy. No new information at this time.

#### **DOSS advice to WOMT and NMFS:**

**Background:** DOSS confirmed the combined older juvenile Chinook salmon loss density at the fish facilities as provided in the table above.

- 1) DOSS advises NMFS and WOMT to continue to operate to an OMR flow limit of no more negative than -2,500 cfs until 3 consecutive days below either the first or second stage loss density triggers in the NMFS BiOp is reached.

If, on Friday, 3/25/11, the combined loss density for the last 3 days is below one of the triggers, DWR, Reclamation, and NMFS will consider a relaxation of the OMR criteria over the weekend. If, for example, the loss densities for Tuesday, Wednesday, and Thursday (reported on Friday) are below 6.64 fish/TAF, projects can relax to no more negative than -3,500 cfs. If the loss density is below 3.32 fish/TAF, projects can relax to no more negative than -5,000 cfs. An emergency DOSS call will be convened if the decision to relax (or not to relax) the OMR limit hinges on one or more loss densities for which the preliminary estimate (prior to being confirmed by DFG) is within 0.10 fish/TAF of the first or second stage triggers in the NMFS BiOp.

- 2) DOSS also advises using the Tisdale rotary screw trap, at least for 1 year, as the location for the new monitoring station on the Sacramento River as required in the NMFS BiOp (p.586). After a year, DOSS will reevaluate the utility of Tisdale as the new monitoring station. At that time, DOSS may suggest a different monitoring station, or the continuation of monitoring at Tisdale.

The preliminary estimate of combined older juvenile loss density for yesterday, 3/21/11, was 0.80 fish/TAF. This is below both the first- and second-stage triggers for loss density in the NMFS BiOp. All of the older juveniles were identified as winter-run Chinook, greater than 111 mm FL.

**Next Meeting:** Conference call, 3/29/11, 9:00 a.m.